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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,375	01/22/2004	Matthew J. Cannon	RIC-98-050C1	3103
25537	7590	03/07/2006	EXAMINER	
MCI, INC 1133 19TH STREET NW 4TH FLOOR WASHINGTON, DC 20036			JAIN, RAJ K	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/761,375	CANNON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Raj Jain	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 25-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanker et al (US006570869B1) in view of Purcell et al (US 6094578).

Regarding claims 25, 30, 35, 39, 43 and 44 Shanker discloses a method and means for establishing a telephone call (see abstract, Figs 1 & 4), comprising:

- receiving a call establishment request (see Figs 1 & 4, col 13 lines 12-33, a call request and establishment message 402 is created and sent to node 100 and then to coding unit 110 for establishing a call request.);

Shanker however fails to disclose mapping of nature of address (NOA) indicator and/or a numbering plan indicator (NPI) for establishing of the call.

Purcell discloses a gateway unit which acts to provide interoperability between disparate mobile communications networks such as for example between US and European networks. The gateway unit processes the translation of a subscriber's global title address from the type of global title addressing used by a first communications network into the type required by the second communications network (see col 3 lines 5-14, col 4 lines 50-57, the protocol conversions are performed based on look-up tables or conversion tables (see abstract, Fig. 6a-6c). The conversion tables translate

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messages from one format to another format and vice versa, furthermore, one skilled in the art will appreciate conversion tables allow a processor to “equate” and translate the components of one field of address to another field of equal address.

Figs. 6a-6c show examples of mapping tables used in the translation process between ANSI and ITU formats (see col 7 line 37 – col 8 line 37). Nature of address entry indicates the type of dialed number, for example, national versus international. The Nature of address entry allows the call process to route a call based on the Nature of address value provided. Numbering Plan indicator contains information identifying the switch from which trunk the group is originating or to which trunk the group is terminating. Telecommunications switches typically operate in known environments with fixed dial plans and the expected digit patterns are pre-defined. By knowing what the digit patterns will be, the telecommunications switch uses an inflexible hard coded program to identify the received digit patterns. The hard coded telecommunications switches are specifically defined for a particular country and would not operate in other countries, as each numbering plan is different and therefore requiring appropriate conversion protocols for a smooth interconnect between different interfaces.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate both an NOA and NPI within Shanker so as to allow for continuous and smooth interconnect of communications path between different interfaces.

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Regarding claims 26 and 36, Purcell discloses means and mapping a numbering plan indicator from first format to the second format (see Figs 6a-6c, col 7 line 65 – col 8 line 35).

Regarding claim 27, Purcell discloses a numbering plan for establishing of phone calls (see Figs 6a-6c, col 7 line 65 – col 8 line 35).

Regarding claims 31 and 40, Purcell discloses means and mapping a nature of address indicator from first format to the second format (see Figs 6a-6c, col 7 line 65 – col 8 line 35).

Regarding claim 32, Purcell discloses mapping of the address indicator for establishing of phone calls (see Figs 6a-6c, col 7 line 65 – col 8 line 35).

Regarding claims 28, 29, 33, 34, 37, 38, 41, 42, 45 and 46 Shanker discloses network signaling protocol such as SIP, and telephony signaling protocol such as SS7, ISDN ISUP and CAS protocols (see col 1 lines 25-37, col 4 line 50 – col 5 line 27).

### ***Response to Arguments***

Applicant's arguments filed 27 January 2006 have been fully considered but they are not persuasive.

With respect to claim 25, applicant contends Shanker in view of Purcell fails to disclose "mapping a nature of address indicator from a first format to a second format".

The examiner respectfully disagrees, nature of address can be subscriber national or international number as stated within applicants specifications on page 2. Shanker

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discloses voice communications network over a packet switched network (see FIG. 1 which depicts a telecommunications network that carries voice calls from an originating node 100 to a terminating node 160 over a packet-switching network 130, in which the voice signaling processing is separated from the processing of the voice data, see col 3 lines 37-col 4 line 20. Shanker also discloses receiving a call establishment request from the originating node to the terminating node (see Fig. 4 which depicts call flow messaging sequence, and col 13 lines 1-32.). Shanker further discloses functional gateways 110 and 150 (Fig. 1) coupled to originating node 100 and terminating node 160 respectively. These gateways provide the necessary protocol conversion from one signal format to another.

Although Shanker shows gateways for the protocol conversion process, however Shanker explicitly fails to show the mapping of one format of a nature of address indicator to a second format.

Purcell explicitly shows a Gateway unit 90 (Fig. 2) that provides interoperability between disparate communications networks (Fig. 1) nationally and internationally (see abstract). Furthermore, Purcell shows "mapping" of the addresses from one format to a second format (see Fig. 6a, which shows mapping of one format (ANSI in this case) to second format (ITU), see also col 7 line 65- col 8 line 19.). Thus Fig. 6a explicitly shows the mapping of nature of address from one format to a second format. Purcell's invention of mapping mobile communications subscribers to make and receive from any location in the world using a single mobile service account. Using this system, a

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person subscribing to a mobile service network outside of the North American network (i.e., a foreign subscriber) can make and receive calls when traveling in North America. Similarly, a person subscribing to a mobile service network within the North American network (i.e., a North American subscriber) can make and receive phone calls when traveling abroad.

Thus although Shanker discloses the use of a gateway within its invention for protocol conversion, it is Purcell's Gateway invention that explicitly outlines and maps the conversion of one format to a second format that further increases the interoperability of international networks by mapping one format to a second format and therefore, allowing roaming from one international network to the other.

Thus it would have been obvious to one of ordinary skill in the art the time of invention to allow interoperability of networks across borders by mapping one number format to another equal number format.

Thus since Shanker in view of Purcell does disclose all recited limitations, therefore claim 25 stands rejected.

With respect to claims 26-29, applicant contends Shanker in view of Purcell fails to disclose additional features cited in claims 26-29.

The examiner respectfully disagrees, claim 26 for example recites mapping a numbering plan indicator from the first format to the second format. Shanker in view of Purcell does disclose a numbering plan indicator from first format to a second format (see Fig 6b and col 7 line 65- col 8 line 20, Purcell shows a mapping table with two formats, one format being ANSI and second format being ITU, furthermore a numbering

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plan is defined 122 within the ITU block. The numbering plan in this is (E.164) is public or more specifically it is international numbering plan with a country code 176 (see Fig. 8) and network code 178, see col 8 lines 57-65.). The numbering plan can be public (E.164) or private as also stated by applicant in page 2 of the specifications.

The numbering plan can be public (E.164) or private as also stated by applicant in page 2 of the specifications.

Again although Shanker discloses the use of a gateway within its invention for protocol conversion, it is Purcell's Gateway invention that explicitly outlines and maps the conversion of one numbering plan format to a second numbering plan format (see Fig. 6a) that increases the interoperability of international networks by mapping one format to a second format and therefore, allowing roaming from one international network to the other, (see Fig 6b, which shows a conversion table for numbering plan from ANSI to ITU (E.164), the E.164 comprises a country code 176 (see Fig. 8) and network code 178. Furthermore the E.164 is used to identify the country and network associated with the subscriber's home register.).

Thus it would have been obvious to one of ordinary skill in the art the time of invention to allow interoperability of networks across borders by mapping one number plan indicator to another equal numbering plan indicator.

Thus since Shanker in view of Purcell does disclose the recited limitation of claim 26 therefore claim 26 stands rejected.



Claim 28 recites the first format includes a SIP protocol. Shanker discloses the signaling units 120, 140 (Fig. 1, col 5 lines 14-25) converting the protocols of the originating node 100 and the terminating node 160, such as DPNSS, ISDN\_PRI, SS7/C7 (including ISUPs, TUPs, and NUPs), H.323, SIP, or CAS, into messages for communicating with one another and for controlling a coding unit over control links 114 and 154. The different protocol formats are defined to illustrate that Shanker's invention of protocol conversion is not limited to one type of protocol, rather is adapted to accept all legacy protocols, and therefore the first format may include a SIP protocol.

Examiner acknowledges that although Shanker discloses the use of a gateway within its invention for protocol conversion, it is Purcell's Gateway invention that explicitly outlines and maps the conversion of one format to a second format that further increases the interoperability of international networks by mapping one format to a second format and therefore, allowing roaming from one international network to the other. And therefore it would have been obvious to one of ordinary skill in the art the time of invention to allow interoperability of networks across borders by mapping one format to another equal format.

Thus since Shanker in view of Purcell does disclose all recited limitations of claim 28 therefore claim 28 stands rejected.

Claim 29 recites wherein the second format includes one of signaling system 7 (SS7) format, integrated services digital network (ISDN) format, ISDN user part (ISUP) format, or channel associated signaling (CAS) format.

Shanker discloses the signaling units 120, 140 (Fig. 1, col 5 lines 14-25) converting the protocols of the originating node 100 and the terminating node 160, such as DPNSS, ISDN\_PRI, SS7/C7 (including ISUPs, TUPs, and NUPs), H.323, SIP, or CAS, into messages for communicating with one another and for controlling a coding unit over control links 114 and 154. The different protocol formats are defined to illustrate that Shanker's invention of protocol conversion is not limited to one type of protocol, rather is adapted to accept all legacy protocols, and therefore the second format may include SS7, ISDN, ISUP or CAS.

Examiner acknowledges that although Shanker discloses the use of a gateway within its invention for protocol conversion, it is Purcell's Gateway invention that explicitly outlines and maps the conversion of one format to a second format that further increases the interoperability of international networks by mapping one format to a second format and therefore, allowing roaming from one international network to the other. And therefore it would have been obvious to one of ordinary skill in the art the time of invention to allow interoperability of networks across borders by mapping one format to another equal format.

Thus since Shanker in view of Purcell does disclose the recited limitations of claim 29 therefore claim 29 stands rejected.

With respect to Claim 30, applicant contends Shanker in view of Purcell fails to disclose "mapping a numbering plan indicator from a first format to a second format".

The examiner respectfully disagrees, Shanker in view of Purcell does disclose a numbering plan indicator from first format to a second format (see Fig 6b and col 7 line 65- col 8 line 20, Purcell shows a mapping table with two formats, one format being ANSI and second format being ITU, furthermore a numbering plan is defined 122 within the ITU block. The numbering plan in this is (E.164) is public or more specifically it is international numbering plan with a country code 176 (see Fig. 8) and network code 178, see col 8 lines 57-65.). The numbering plan can be public (E.164) or private as also stated by applicant in page 2 of the specifications.

Although Shanker discloses the use of a gateway within its invention for protocol conversion, it is Purcell's Gateway invention that explicitly outlines and maps the conversion of one numbering plan format to a second numbering plan format (see Fig. 6a) that increases the interoperability of international networks by mapping one format to a second format and therefore, allowing roaming from one international network to the other, (see Fig 6b, which shows a conversion table for numbering plan from ANSI to ITU (E.164), the E.164 comprises a country code 176 (see Fig. 8) and network code 178. Furthermore the E.164 is used to identify the country and network associated with the subscriber's home register.).

Thus it would have been obvious to one of ordinary skill in the art the time of invention to allow interoperability of networks across borders by mapping one numbering plan indicator to another equal numbering plan indicator.

Thus since Shanker in view of Purcell does disclose the recited limitations of claim 30 therefore claim 30 is not patentable and rejected accordingly.

Claims 31-34 depend from claim 30 and recite limitations similar to claims 25-29 of which Shanker in view of Purcell does disclose the recited limitations and therefore rejected accordingly.

Claims 35, 39, 43 and 44 recite limitations similar to claims 25 and 30 of which Shanker in view of Purcell does disclose the recited limitations and therefore rejected accordingly.

Claims 36-38 depend from claim 35 and recite limitations similar to claims 26-29 of which Shanker in view of Purcell does disclose the recited limitations and therefore rejected accordingly.

Claims 40-42 depend from claim 39 and recite limitations similar to claims 26-29 of which Shanker in view of Purcell does disclose the recited limitations and therefore rejected accordingly.

Claims 45-46 depend from claim 44 and recite limitations similar to claims 26-29 of which Shanker in view of Purcell does disclose the recited limitations and therefore rejected accordingly.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

RJ  
March 2, 2006



HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600